



**ATLONA**  
**6x4 COMPONENT MATRIX SWITCHER**  
**WITH STEREO AUDIO**  
**AT-COMP-64M**

**USER MANUAL**



## TABLE OF CONTENTS

1. Introduction	1
2. Features	1
3. Package Contents	1
4. Specifications	2
5. Panel Descriptions	2
5.1 Front Panel	2
5.2 Rear Panel	3
6. Remote Control	4
7. RS232 Serial Interface	5
7.1. Connect a PC or Control System	5
7.2. RS232	5
7.3. Protocol Commands	5
8. RS232 Serial Commands	6
8.1. Power Off Mode	6
8.2. Front Panel Lock	6
8.3. Unit Reset	6
9. Typical Application	7
10. Installation	8
11. Safety Information	9
12. Warranty	10
13. Atlona Product Registration	11

## INTRODUCTION

Atlona Technologies' AT-COMP-64M is one of the most innovative Component Matrix switchers with Stereo Audio on the market. The AT-COMP-64M has 6 individual Component Video (RCA) inputs with Stereo Audio and 4 individual outputs. Because it is a matrix switch, any input can route to any output; and the same input can route to all outputs or any other combination. Boasting high speed Video Bandwidth of 325MHz, Maximum 380Mhz, this unit is ideal for connecting sources including: (VCRs, Camcorders, Video Game Consoles, DVDs, Satellite Receivers, Set Top Boxes, etc.) to desired displays such as: (HDTV, LCDs, Plasma Monitors, Video Projectors, etc.) Selection of inputs can be achieved manually through the Front Panel, an Infrared Remote Control unit or RS232 control. Switch with flawless and crystal-clear distribution of all High Res. HDTV video formats up to 1080p as well as audio signals. With these attributes, the AT-COMP-64M is a great matrix switch capable of handling High Definition Television applications.

## FEATURES:

- 6 inputs to 4 outputs Component Video (Matrix Switcher)
- Supported Signals:
  - Component Video: YPBPR
  - Audio : Stereo Audio (Audio Right/Audio Left)
- Support RS 232 interface
- Control Through IR remote control and Manually via Front Panel Buttons
- Video Bandwidth: 325MB
- Resolutions: 480p, 576p, 720p, 1080i, 1080p
- Included 19 inch Ear mounts
- Power supply DC12Volt, Universal Type Switch 100~230VAC, 50/60Hz

## PACKAGE CONTENTS:

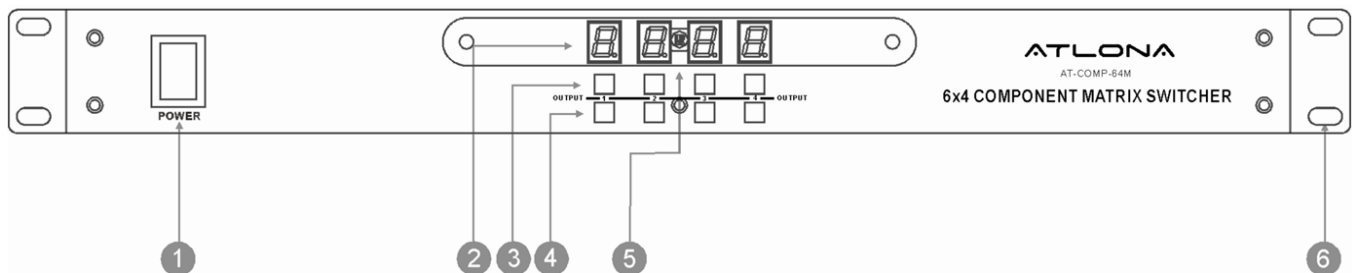
- AT-COMP-64M Matrix Switcher x 1.
- Instruction Manual x 1
- IR Remote Controller
- RS 232 Drive CD x 1
- Universal AC Adaptor : 12V DC
- 19in. Rack Mount ears ( pair ) x 1

## SPECIFICATIONS

Type of Switcher	6 inputs to 4 outputs, Component Video/Digital Audio Matrix Switch
I/O Signals	Component Video (YPBPR) 0.5~1.0Vpp, DDC 5Vpp, Stereo Audio - 2x RCA connector (Red/white)
Video Bandwidth	325MHz (-3db), 200mVp-p
Video Supported	High Resolution formats 480i/p, 720p & 1080i/p
Audio Supported	Stereo Audio(Audio Right/Audio Left)
Low all hostile crosstalk	-83 db@5MHz
Controls	IR remote, Select buttons on the front panel & RS232
PC RS232 Control	RS232 interface serial via DRV on a PC
Gain control	60MHz 0.1 db gain flatness
Safety Approvals	CE, FCC, RoHS(2002/95/EC)
Dimensions (LWH)	19"x 7.87" x 1.73"(482mm x 200mm x 44mm)
Power Supply	12V DC. Use Universal Switch Type 50/60Hz,100~230 VAC
Shipping Weight	4.15 Kgs / 8.58 lb

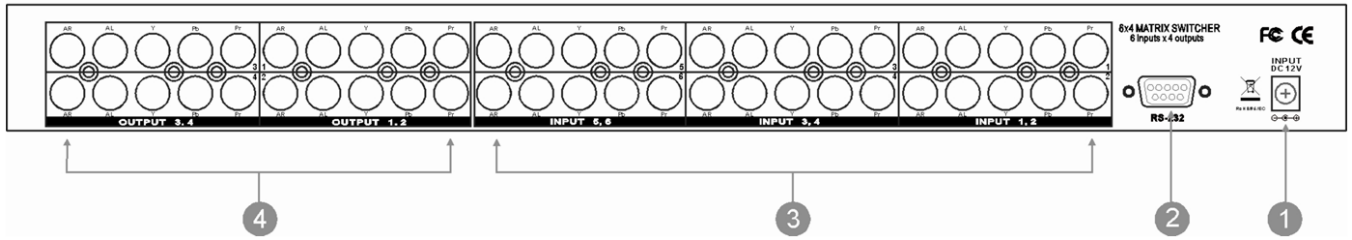
## PANEL DESCRIPTIONS

### 1. Front Panel



1. POWER SWITCH: The power switch turns the unit ON and OFF. The LED will illuminate red to indicate that the switcher is ON
2. OUTPUT STATUS LED DISPLAY. Output channels 1 to 4 show from LED display. This will illuminate red to indicate that desired video source is present on chosen input.
3. & 4. INPUT SOURCE SELECT BUTTONS. Setup the input sources 1 - 6
5. IR SENSOR. The IR sensor receives IR commands from the supplied remote controller
6. 19 INCH EAR MOUNT PAIR. 19 inch Ear Rack Mount pair

## 2. Rear Panel



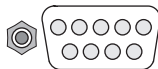
1. DC Power Input. DC power plug-park input connector. Ensure that the plug-park used is of an approved type and is of sufficient current carrying capacity with the correct voltage and connector polarity. 12Volt DC power supply 2A Max.

Power Jack:



DC Jack - inner OD Ø 2.1mm (+ )  
 Outside OD Ø 5.5mm (GND)  
 Power input - 12VDC, 2A

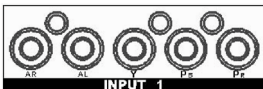
2. RS 232 Connection. RS 232 control is to allow interfacing to a PC, such as a computer or touch panel control, to the switcher via DB-9pin Female connector for serial RS-232 control



DB-9pin Female connector

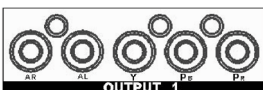
3. INPUTS: 1-6 Component/Stereo Audio. Connect desired source of Component Video(YPBPR)/Stereo Audio device to 6x4 switcher.

Inputs 1- 6 port source signals :  
 Component Video(YPBPR),  
 3x RCA Connectors,  
 Stereo Audio,  
 2x RCA Connectors



4. Outputs:1- 4 Component/Stereo Audio. Connect desired signal of Component Video(YPBPR), & Audio direct to Female RCA connector. This connector supports component video & audio to HDTV display device.

Output 1- 4 display port signals :  
 Component Video(YPBPR),  
 3x RCA Connectors,  
 Stereo Audio,  
 2x RCA Connectors



## REMOTE CONTROL

Before making any connections to the AT-COMP-64M, observe the following:

Mains voltage supply must match the label on the supplied plug-Pack (+/- 10%)

Power switch is OFF

All system grounds (earth) must be connected to a common point.

Avoid powering equipment within a system from multiple power sources that may be separated by large distances

Connect all audio video sources and destination equipment

Power up all desired sources and destination and displays

For each destination output select the appropriate input source by using the front panel input 1~4 select buttons, the supplied IR remote control, or through the RS 232 serial communications port.

Upon power up, the switcher will return to its last used setting before being powered down.

### 1. SWITCH POWER ON or OFF.

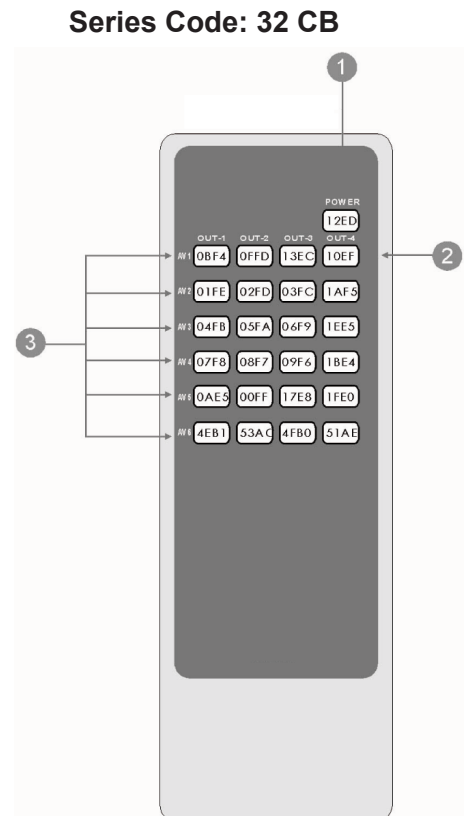
Controller with a separate power to turn ON and OFF

### 2. OUTPUT 1 - 4 : OUTPUT TO TV DISPLAYS.

- Output -1 : TV-1 Component Video (YPBPR) HDTV Display
- Output -2 : TV-2 Component Video (YPBPR) HDTV Display
- Output -3 : TV-3 Component Video (YPBPR) HDTV Display
- Output -4 : TV-4 Component Video (YPBPR) HDTV Display

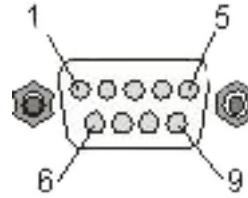
### 3. INPUT 1 - 6 : INPUT VIDEO SOURCES SELECTION.

- Input -1 : AV-1 Component Video (YPBPR) Signal source device
- Input -2 : AV-2 Component Video (YPBPR) Signal source device
- Input -3 : AV-3 Component Video (YPBPR) Signal source device
- Input -4 : AV-4 Component Video (YPBPR) Signal source device
- Input -5 : AV-5 Component Video (YPBPR) Signal source device
- Input -6 : AV-6 Component Video (YPBPR) Signal source device



1. Connect a PC or Control System

Pin	RS-232	Definition
1	-	Not used
2	TX	Transmitter
3	RX	Receiver
4	-	Not used
5	GND	Ground
6	-	Not used
7	-	Not used
8	-	Not used
9	-	Not used



2. RS232

Atlona’s AT-COMP-64M can be controlled via the RS-232 serial control port to allow for interfacing to a PC, or similar third party control system.

The serial communication parameters are 9600 baud, 8 bit, No Parity and 1 stop bit

When the unit recognizes a complete command it will perform the requested action - there is no delimiter character required.

The unit does not send out a message when a value is changed from the front panel or by IR control. If the unit needs to be controlled via the front panel in addition to the RS232 control, you should regularly poll the unit status to ensure the control system accurately relate the current settings.

3. PROTOCOL COMMANDS

To Switch Inputs to Outputs

**SBI0X00Y** - Where X is Output Number (1-4) and Y is Number (1-6)

Unit will respond with

**SBUD0X0Y** - Where X is Output Number (1-4) and Y is Input Number (1-6)

Example : Send Input 6 to Output 4

**SBUD0604** – Send

**SBI06004** – Rcvd

*Note: Turning the unit System Power Off over RS232 will distinguish the LED display leaving only the Power Switch LED on. The Video and Audio outputs will also mute. While the unit is turned off by RS232 it will continue to accept and act upon switching commands. For example, if the unit is in the off mode (via RS232) and you send a command to switch an input to an output, that route will complete and the video and audio will now appear on that channel only. The front panel LED for that particular output will also show the input selected (for that single output channel only). The remaining LED's will remain off and video and audio outputs muted. The unit will still return to its status and change messages in response to the commands sent while in Power Off state. A hard reset command (SBALLRST) will return the unit to normal operation and also unlock the front panel.*

### 1. POWER OFF MODE

**SBSYSMOF** - Place system into Standby (Soft Power Off)

**SBSYSMON** - Bring unit out of Standby (Soft Power On)

Unit will respond with

**SBALOFAK** - Unit is in Standby

**SBALONAK** - Unit is no longer in Standby

Example : Put Unit in Standby (Soft Power)

**SBSYSMOF** - Send

**SBALOFAK** - Rcvd

### 2. FRONT PANEL LOCK

*Note: Hard resetting the unit will unlock the Front Panel controls.*

**SBSYSMLK** - When front panel is locked, changes can only be made by RS232

**SBSYSMUK** - Front Panel Unlock

Unit will respond with

**SBSYSLOK** - Front Panel has been Locked

**SBSYSULK** - Front Panel has been Unlocked

Example : Lock Front Panel Buttons

**SBSYSMLK** - Send

**SBSYSLOK** - Rcvd

### 3. UNIT RESET

**SBALLRST** - Reset every output to Input 1

Unit will respond with

**SBRSTACK** - Unit has reset each Output to Input 1

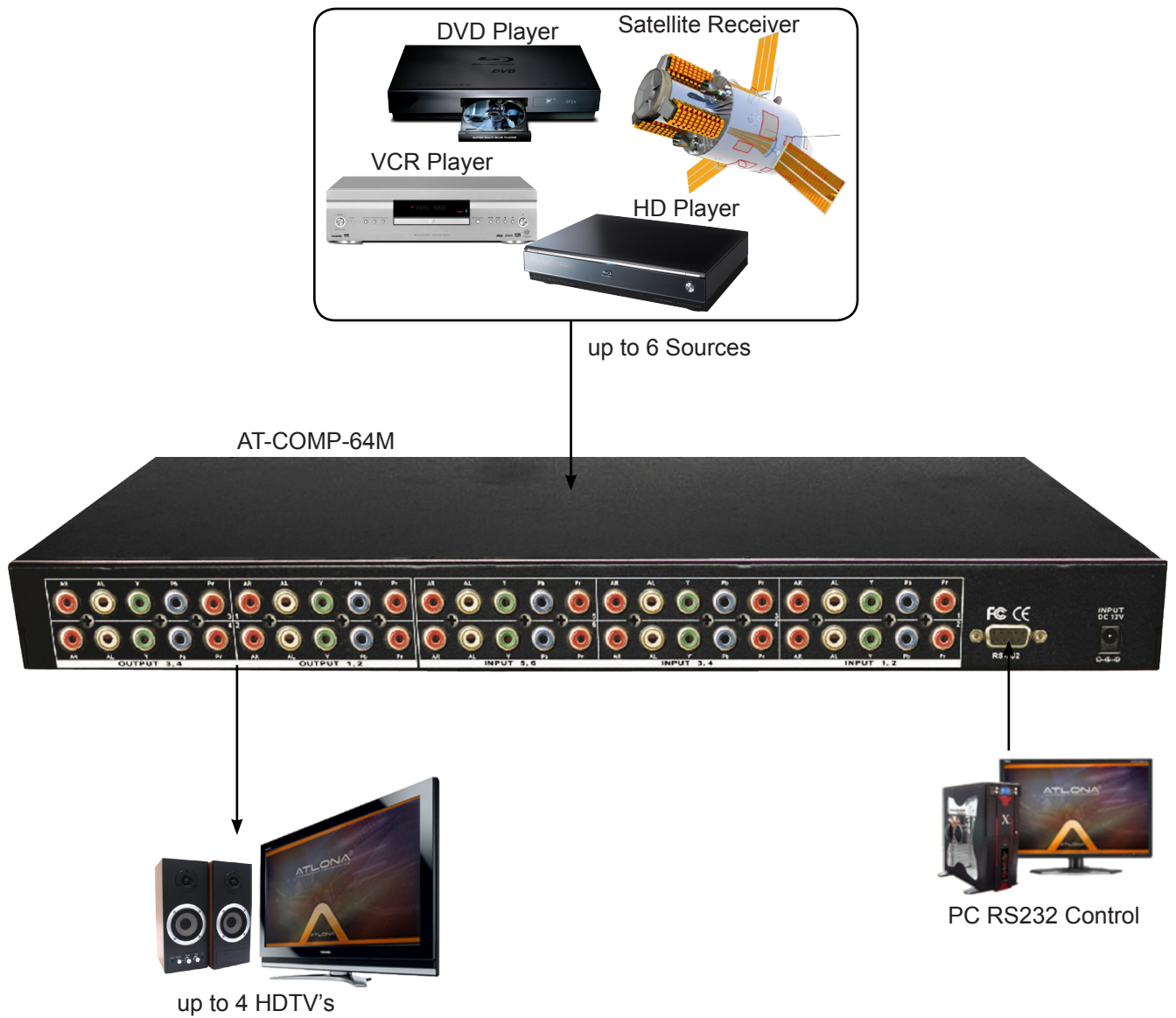
Example : Reset all outputs to Input 1

**SBALLRST** - Send

**SBRSTACK** - Rcvd



TYPICAL APPLICATION



## INSTALLATION

### CONTROL PORTS :

1. IR REMOTE - IR Remote Controller
2. RS 232 Interface - RS 232 interface system

### INPUTS 1 - 6 HD SOURCE SIGNALS :

COMPONENT VIDEO - Component Video(YPBPR), RCA's

AUDIO - Stereo Audio, RCA's

### OUTPUT 1 - 4 HDTV DISPLAY SIGNALS :

COMPONENT VIDEO - Component Video(YPBPR), RCA's

AUDIO - Stereo Audio, RCA's

### Safeguards

To reduce the risk of electric shock, do not expose this product to rain or moisture.

If the wall plug does not fit into your local power socket, hire an electrician to replace your obsolete socket.

Do not modify the wall plug. Doing so will void the warranty and safety features.

This equipment should be installed near the socket outlet and the device should be easily accessible in case it requires disconnection.

### Precautions

FCC Regulations state that any unauthorized changes or modifications to this equipment not expressly approved by the manufacturer could void the user's authority to operate this equipment.

Operate this product using only the included external power supply. Use of other power supplies could impair performance, damage the product or cause fires.

In the event of an electrostatic discharge, this device may automatically turn off. If this occurs, unplug the device, and plug it back in.

Protect and route power cords so they will not be stepped on or pinched by anything placed on or against them. Be especially careful of plug-ins, or cord exit points from this product.

Avoid excessive humidity, sudden temperature changes or temperature extremes.

Keep this product away from wet locations such as bathtubs, sinks, laundries, wet basements and swimming pools.

Use only accessories recommended by ATLONA to avoid fire, shock or other hazards.

Unplug the product before cleaning. Use a damp cloth for cleaning. Do not use cleaning fluid or aerosols, which could enter the unit and cause damage, fire or electrical shock. Some substances may also mar the finish of the product.

Never open or remove unit panels or make any adjustments not described in this manual. Attempting to do so could expose you to dangerous electrical shock or other hazards. It may also cause damage to your AT-COMP-64M. Opening the product will void the warranty.

Do not attempt to service the unit. Instead disconnect it and contact your Authorized ATLONA reseller or contact ATLONA directly.

**1. LIMITED WARRANTY**

Atlona Technologies warrants that (a) its products (the “Product”) will perform substantially in accordance with the accompanying written materials for a period of 3 YEARS from the date of receipt and (b) that the Product will be free from defects in materials and workmanship under normal use and service for a period of 3 years. In the event applicable law imposes any implied warranties, the implied warranty period is limited to 3 years from the date of receipt. Some jurisdictions do not allow such limitations on duration of an implied warranty, so the above limitation may not apply to Customer.

**2. CUSTOMER REMEDIES**

Atlona Technologies and its suppliers’ entire liability and Customer’s exclusive remedy shall be, at Atlona Technologies’ option, either return of the price paid for the Product, or repair or replacement of the Product that does not meet this Limited Warranty and which is returned to Atlona Technologies with a copy of Customer’s receipt. This Limited Warranty is void if failure of the Product has resulted from accident, abuse, or misapplication. Any replacement Product will be warranted for the remainder of the original warranty period or 3 year, whichever is longer.

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